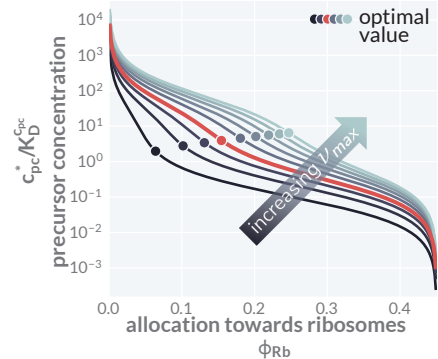


(A)

steady-state precursor concentration



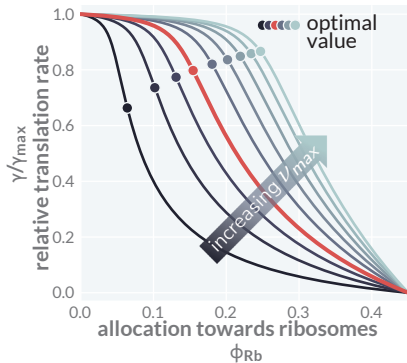
analytical solution

$$N = \nu_{max}(1 - \phi_{Rb} - \phi_O)$$

$$c_{pc}^* = \frac{N}{\lambda} - 1$$

(B)

steady-state translation rate

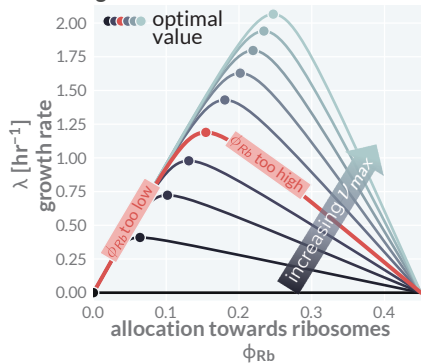


analytical solution

$$\gamma(c_{pc}^*) = \gamma_{max} \left(1 + \frac{K_M^{c_{pc}} \lambda}{N - \lambda} \right)^{-1}$$

(C)

steady-state growth rate



analytical solution

$$\Gamma = \gamma_{max} \phi_{Rb}$$

$$\lambda = \frac{N + \Gamma - \sqrt{(N + \Gamma)^2 - 4N\Gamma(1 - K_M^{c_{pc}})}}{2(1 - K_M^{c_{pc}})}$$